

1 In the Claims:

2 Claims 1, 4, 5 and 33 are amended.

3 Claims 1, 4-17, 20, 21, 23-27, 29, and 32-37 remain pending and are listed
4 below:

5 1. (Currently Amended) A command line utility embodied in one or
6 more computer-readable storage media, the command line utility comprising:

7 a command schema including one or more commands for engaging, from a
8 management station on a network, an operating system on at least one selected
9 target station accessible over the network enabling at least one of retrieval of
10 management information from and initiation of a management service available
11 through an object model target schema recognized by the at least one selected
12 target station accessible over the network, the command schema comprising:

13 an alias class which defines a command template, each alias of the
14 alias class representing a single command;

15 a verb class ~~as a subclass to the alias class~~, each instance of the verb
16 class representing a behavior available through an alias;

17 a format class ~~as a subclass to the alias class~~, each instance of the
18 format class representing a list of properties that will be returned through
19 processing an alias; and

20 a connection class ~~as a subclass to the alias class~~, each instance of
21 the connection class providing parameters used through an alias when
22 establishing a connection to a target namespace within the target schema;

23 an interactive user interface configured to receive the one or more
24 commands in the command schema from a user of the management station,
25

1 allowing the user to formulate via the command line utility an instant request for at
2 least one of management information and management services and communicate
3 a response of the at least one selected target station to the user; and

4 an object model command schema to define a mapping between the one or
5 more received commands in the command schema and the object model target
6 schema and interpret the one or more commands from the command schema into a
7 management command operable to cause one of the retrieval of the management
8 information from and the initiation of the management service on the at least one
9 selected target station.

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11 2. (Canceled).

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13 3. (Canceled).

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15 4. (Currently Amended) A command line utility as recited in claim 1,
16 the command schema further comprising:

17 a parameter class ~~as a subclass to the verb class~~, each instance of the
18 parameter class representing parameters accepted by a verb from the verb class.

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20 5. (Currently Amended) A command line utility as recited in claim 1,
21 the command schema further comprising:

22 a property class ~~as a subclass to the format class~~, each instance of the
23 property class representing property values for properties within a list of
24 properties.

1 6. (Previously Presented) A command line utility as recited in claim 1,
2 the command schema further comprising:

3 a localized string class, each instance of the localized string class providing
4 language-specific text relevant to an alias.

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6 7. (Previously Presented) A command line utility as recited in claim 1,
7 the command schema further comprising:

8 a qualifiers class, each instance of the qualifiers class representing
9 qualifiers to be applied to elements of an alias.

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11 8. (Previously Presented) A command line utility as recited in claim 1,
12 the command schema further comprising:

13 a see-also association, each instance of the see-also association
14 providing associations to aliases which are related to an alias.

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16 9. (Original) A command line utility as recited in claim 1, wherein the
17 one or more commands are organizable into role-oriented namespace, such that
18 commands related to particular administrative tasks are found together.

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20 10. (Original) A command line utility as recited in claim 1, wherein the
21 command schema is extensible to permit the generation of additional commands to
22 be added to the one or more commands.

1 11. (Original) A command line utility as recited in claim 1, wherein the
2 command schema is configurable to permit reconfiguration of the one or more
3 commands.

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5 12. (Previously Presented) A command line utility as recited in claim 1,
6 the command schema further comprising:

7 a parameter class to define parameters accepted by a verb instance;
8 a property class to define property instances, each property instance
9 representing a property value from a property list;
10 a qualifier class to define qualifier instances, each qualifier instance
11 representing constraints on elements of an alias instance;

12 a localized string class to define localized string instances, each localized
13 string instance representing a text localization for translating text into a localized
14 language; and

15 a see-also association to associate an alias instance with other related alias
16 instances.

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18 13. (Original) A command line utility as recited in claim 1, wherein the
19 target schema comprises a WMI object model.

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21 14. (Original) A command line utility as recited in claim 1, wherein the
22 command schema is a plurality of command schemas, each command schema
23 representing an instant set of one or more commands.

1 15. (Original) A command line utility as recited in claim 1, wherein the
2 command schema resides on a local machine and the target schema resides on one
3 or more remote machines.

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5 16. (Previously Presented) A management command system operable to
6 retrieve management information and initiate a management service available
7 through an object model target schema recognized by at least one selected target
8 station accessible over a network, the management command system comprising:

9 an interactive user interface configured to receive one or more commands
10 in the command schema formulated as an instant request by a user at a
11 management station for engaging an operating system on at least one selected target
12 station and communicate a response of the at least one selected target station
13 to the user; and

14 a control schema including the one or more commands to be received by
15 the interactive user interface, including:

16 an alias class to define alias instances, each alias instance
17 representing the at least one command;

18 a verb class to define verb instances, each verb instance representing
19 behavior available through an alias instance;

20 a parameter class to define parameters accepted by a verb instance;

21 a format class to define format instances, each format instance
22 having a list of properties to be displayed through an alias instance;

23 a property class to define property instances, each property instance
24 representing a property value from a property list;

1 a connection class to define connection instances, each connection
2 instance representing connection parameters used by an alias instance to establish
3 a connection to the target schema;

4 a qualifier class to define qualifier instances, each qualifier instance
5 representing constraints on elements of an alias instance;

6 a localized string class to define localized string instances, each
7 localized string instance representing a text localization for translating text into a
8 localized language; and

9 a see-also association to associate an alias instance with other related
10 alias instances.

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12 17. (Previously Presented) A management application embodied in one
13 or more computer-readable storage media, the management application
14 comprising:

15 a set of commands generated by an object model command schema to
16 operate against an object model target schema of at least one selected target, the
17 command schema defining a mapping between the set of commands and the target
18 schema, and wherein the command schema is configurable to permit
19 reconfiguration of individual commands in the set of commands; and

20 an interactive interface utility configured to allow a user to formulate an
21 instant request and receive the user command to facilitate implementation of
22 individual commands within the set of commands, wherein the interactive
23 interface utility includes at least one of:

24 a command line interface utility configured to receive textual entry
25 of the user command; and

1 a graphical user interface utility.

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3 18. (Canceled).

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5 19. (Canceled).

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7 20. (Original) A management application as recited in claim 17, wherein
8 the set of commands is organizable into role-oriented namespace, such that
9 individual commands related to particular administrative tasks are found together.

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11 21. (Original) A management application as recited in claim 17, wherein
12 the command schema is extensible to permit the generation of additional
13 commands to be added to the set of commands.

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15 22. (Canceled).

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17 23. (Original) A management application as recited in claim 17, wherein
18 the command schema comprises:

19 an alias class to define alias instances, each alias instance representing a
20 command within the set of commands;

21 a verb class to define verb instances, each verb instance representing
22 behavior available through an alias instance;

23 a parameter class to define parameters accepted by a verb instance;

24 a format class to define format instances, each format instance having a list
25 of properties to be displayed through an alias instance;

1 a property class to define property instances, each property instance
2 representing a property from a property list;

3 a connection class to define connection instances, each connection instance
4 representing connection parameters used by an alias instance to establish a
5 connection to the target schema object model;

6 a qualifier class to define qualifier instances, each qualifier instance
7 representing constraints on elements of an alias instance;

8 a localized string class to define localized string instances, each localized
9 string instance representing a text localization for translating text into a localized
10 language; and

11 a see-also association to associate an alias instance with other related alias
12 instances.

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14 24. (Previously Presented) A management application embodied in one
15 or more computer-readable storage media, the management application
16 comprising:

17 a first object model to control configuration and behavior of the
18 management application in operating against and managing an operating system of
19 a second object model operating on at least one selected target system accessible
20 over a network, the first object model including:

21 a set of commands for directing the configuration and the behavior
22 of the management application; and

23 a command schema defining a mapping between the set of
24 commands and instructions understandable by the second object model; and

1 an interactive interface configured to receive the set of commands from a
2 user at a management station, wherein the interactive interface includes at least
3 one of:

4 a command line interface utility configured to allow the user to
5 formulate an instant command and receive textual entry of the user command; and
6 a graphical user interface utility.

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8 25. (Original) A management application as recited in claim 24, wherein
9 the first object model comprises:

10 an alias class to define alias instances, each alias instance representing a
11 command used by the management application;

12 a verb class to define verb instances, each verb instance representing
13 behavior available through an alias instance;

14 a parameter class to define parameters accepted by a verb instance;

15 a format class to define format instances, each format instance having a list
16 of properties to be displayed through an alias instance;

17 a property class to define property instances, each property instance
18 representing a property from a property list;

19 a connection class to define connection instances, each connection instance
20 representing connection parameters used by an alias instance to establish a
21 connection to the second object model;

22 a qualifier class to define qualifier instances, each qualifier instance
23 representing constraints on elements of an alias instance;

1 a localized string class to define localized string instances, each localized
2 string instance representing a text localization for translating text into a localized
3 language; and

4 a see-also association to associate an alias instance with other related alias
5 instances.

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7 26. (Original) A management application as recited in claim 24, wherein
8 the second object model comprises a WMI object model.

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10 27. (Previously Presented) A computer-implemented method
11 comprising:

12 receiving a command from a user that was formulated as an instant request
13 by the user at a management station through an interactive command line
14 interface;

15 fetching an alias for the command, wherein the alias is an instance of an
16 alias class and is the primary class in a command schema, and wherein the
17 command schema additionally includes:

18 a verb class to define verb instances, each verb instance representing
19 behavior available through an alias;

20 a parameter class to define parameters accepted by a verb instance;

21 a format class to define format instances, each format instance
22 having a list of properties to be displayed through an alias;

23 a property class to define property instances, each property instance
24 representing a property from a property list;

1 a connection class to define connection instances, each connection
2 instance representing connection parameters used by an alias to establish a
3 connection to the target namespace;

4 a qualifier class to define qualifier instances, each qualifier instance
5 representing constraints on elements of an alias;

6 a localized string class to define localized string instances, each
7 localized string instance representing a text localization for translating text
8 into a localized language; and

9 a see-also association to associate an alias with other related aliases;

10 interpreting the command based on the alias and the current operating
11 environment of the command line interface;

12 executing the command as one or more WMI API calls against a targeted
13 namespace representing at least one selected target system that is accessible via a
14 network;

15 receiving WMI data in XML form;

16 applying an XSL style sheet format the WMI data; and

17 presenting the WMI data through the command line interface.

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19 28. (Canceled).

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21 29. (Previously Presented) A method as recited in claim [[28]] 27,
22 wherein the alias and the current operating environment are determined by
23 command entries to the command line interface.

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25 30. (Canceled).

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2 31. (Canceled).

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4 32. (Original) One or more computer-readable media storing computer-
5 executable instructions that, when executed on one or more processors, perform
6 the method of claim 27.

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8 33. (Currently Amended) A computer-implemented method of
9 managing objects in a target schema comprising:

10 providing an interactive user interface configured to allow a user to
11 formulate a set including one or more instant commands operable to receive
12 management information and initiate a management service and receive the
13 commands from the user;

14 defining a command structure through an object-oriented command
15 schema, the command schema comprising:

16 an alias class which defines a command template, each alias of the
17 alias class representing a single command;

18 a verb class ~~as-a-subclass-to-the-alias-class~~, each instance of the verb
19 class representing a behavior available through an alias;

20 a format class ~~as-a-subclass-to-the-alias-class~~, each instance of the
21 format class representing a list of properties that will be returned through
22 processing an alias; and

23 a connection class ~~as-a-subclass-to-the-alias-class~~, each instance of
24 the connection class providing parameters used through an alias when
25 establishing a connection to a target namespace within the target schema;

1 instantiating an object of the alias class as an alias by receiving parameters
2 of the alias class via the commands received from the user through the user
3 interface, the alias representing a command which maps to an object in the target
4 schema maintained on at least one selected target system accessible via a network
5 configured to at least one of retrieve management information and initiate a
6 management service; and

7 executing the command against the object in the target schema of the at
8 least one selected target system.

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10 34. (Previously Presented) A computer-implemented method as recited
11 in claim 33, further comprising:

12 receiving data related to the object in the target schema in XML form;
13 retrieving an XSL file from a location defined through the alias;
14 formatting the data for display by applying an XSL style sheet from the
15 XSL file; and
16 displaying the data through the user interface.

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18 35. (Previously Presented) A computer-implemented method as recited
19 in claim 33, wherein the user interface is a command line user interface.

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21 36. (Previously Presented) A computer-implemented method as recited
22 in claim 33, wherein the user interface is a graphical user interface.

1 37. (Previously Presented) One or more computer-readable media
2 storing computer-executable instructions that, when executed on one or more
3 processors, perform the computer-implemented method of claim 33.

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